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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/578,684   | 03/29/2007  | Nobuyuki Mori        | VX062739 PCT        | 3683             |
| 23400 7590 11/02/2009<br>POSZ LAW GROUP, PLC<br>12040 SOUTH LAKES DRIVE<br>SUITE 101<br>RESTON, VA 20191 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| SMITH, PRESTON   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 1794   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/578,684

## Applicant(s)

MORI ET AL.

## Examiner

PRESTON SMITH

## Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 06/26/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1,2,6-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Mori Nobuyuki, JP2002306059 (EP 1380212 used as translation) in view of Gerhard Grolig, US-Patent 7,011,858.**

**Regarding claims 1,2,6-11**, Nobuyuki teaches a monolayer casing (tubular 0022) for food which comprises polyvinylpyrrolidone and thermoplastic resin (0009). A smoke curing solution (water containing the flavor components of smoke) is applied to the

casing (0011). The thermoplastic resin is polyamide resin(0009) and the polyvinylpyrrolidone may be a crosslinked polymer of N-vinylpyrrolidone (0017). The polyamide resin and polyvinylpyrrolidone may be present in amounts of 50 to 1 by weight relative to each other (0009).

Nobyuki fails to teach a multilayer tubular casing.

Grolig teaches that it is well known in the art to construct multilayer tubular casings having a polyamide inner layer further comprising a polyethylene and polyamide layer (column 8, lines 15-18). The olefin based polymer layer (polyethylene) and the polyamide (polyamide 6 which is a polyamide resin) layers are added as vapor barrier layers (column 6, lines 10-25) (additionally, polyamide 6 or nylon 6 can act as an oxygen barrier layer as pointed out on page 6, lines 28-35 of applicant's specification). It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of Grolig with Nobyuki by further adding a polyethylene and polyamide layer to the polyamide/crosslinkedpolyvinylpyrrolidone casing of Nobyuki discussed previously since the addition of these additional layers would hinder vapor and oxygen flow (provide additional protection from) to the product encased and would thus further preserve the product encased during storage (which would be advantageous for sellers of the encased food product). Additionally, the addition of the extra layers taught by Grolig to the invention of Nobyuki would serve to prevent the flow of the liquid contained in the filling of the polyamide/crosslinkedpolyvinylpyrrolidone portion of the casing to the outside of the casing during cooking (since the extra layers provide extra vapor barriers)(see paragraph 0012 of

Nobyuki). This would reduce the probability unattractive wrinkles in the packaged product (see paragraph 0012 of Nobyuki).

Additionally, regarding a smoke curing liquid applied to the innermost layer, since the smoke curing liquid is applied to the polyamide/crosslinkedpolyvinylpyrrolidone casing of Nobyuki as discussed previously, the composite invention of Nobyuki in view of Grolig would be a multilayer casing wherein the innermost layer is applied with a smoke curing liquid.

**Regarding claims 12 and 13**, Nobyuki teaches packaging food in the casing wherein the smoking curing liquid is applied to the casing (0012 and 0014) and cooking the casing (heat treatment) containing the food product (0013). It would have thus been obvious to one having ordinary skill in the art at the time of the invention to cook the casing of the composite invention of Nobyuki in view of Grolig as discussed previously in order to provide a cooked food product.

**Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Mori Nobyuki, JP2002306059 (EP 1380212 used as translation) in view of Gerhard Grolig, US-Patent 7,011,858 and Arthur M. Dowell, US-Patent 4,150,697.**

**Regarding claim 3**, the references teach the invention of claim 1 as discussed previously however the references fail to teach the casing subjected to corona discharge.

Dowell teaches that it is well known in the art to subject food (meat) casings to corona discharge (column 2, lines 42-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to subject the casing of the composite invention of Nobyuki in view of Gerhard to corona discharge because this would improve the food's adherence to the casing (column 2, lines 42-50). This would allow for more favorable consumption of the food product (upon breaking of the casing the food would not readily slip out).

### ***Response to Arguments***

Applicant's arguments filed 06/26/2009 have been fully considered but they are not persuasive.

Applicant argues on page 6:

"Since the innermost layer of the multilayer tube allegedly proposed by Grolig is a polyamide layer, one of ordinary skill in the art would have no reason to apply a smoke-curing liquid thereto, as required in the present claims, because the skilled artisan would have no reasonable expectation that such a smoke-curing liquid would sufficiently bond to the polyamide layer. Furthermore, the casing of Grolig has an outermost layer containing a flavor ingredient which structure is opposite to that required in the present claims where the smoke-curing liquid is applied to the innermost layer. Thus, the structure proposed by Grolig is opposite to that required in the present claims."

Grolig was simply used to teach that that it is well known in the art to construct multilayer tubular casings having a polyamide inner layer further comprising a

polyethylene and polyamide layer. The monolayer casing of Nobyuki contains the smoke curing solution (also, the monolayer casing of Nobyuki comprises polyamides just like the inner layer of Grolig as mentioned in the previous office action). Further adding a polyethylene and polyamide layer as taught by Grolig to the polyamide/crosslinkedpolyvinylpyrrolidone casing of Nobyuki would be advantageous since the addition of these additional layers would hinder vapor and oxygen flow (provide additional protection from) to the product encased and would thus further preserve the product encased during storage (which would be advantageous for sellers of the encased food product). Additionally, the addition of the extra layers taught by Grolig to the invention of Nobyuki would serve to prevent the flow of the liquid contained in the filling of the polyamide/ crosslinkedpolyvinylpyrrolidone portion of the casing to the outside of the casing during cooking (since the extra layers provide extra vapor barriers)(see paragraph 0012 of Nobyuki). This would reduce the probability unattractive wrinkles in the packaged product (see paragraph 0012 of Nobyuki). Additionally, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

"Dowell discusses treatment of regenerated cellulose casings with surface activating energy. However, the casings proposed by Dowell are made of materials different than that required in the present claims. Applicant respectfully submits that Mori, Grolig, and/or Dowell provide no reason to one of ordinary skill in the art to apply a corona discharge treatment to a completely different material than that discussed in Dowell. Therefore, there is no reason in the combination of Mori, Grolig, and Dowell to subject a multitayer tube to corona discharge..."

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Dowell was simply used to teach that it is well known in the art to subject food (meat) casings to corona discharge. The motivation for further using corona discharge as taught by Dowell with the composite invention of Nobyuki in view of Gerhard would have been to improve the food's adherence to the casing as pointed out in the previous office action.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRESTON SMITH whose telephone number is (571)270-7084. The examiner can normally be reached on Mon-Th 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Drew E Becker/  
Primary Examiner, Art Unit 1794

prs